
U.S. Department of the Interior • U.S. Geological Survey

MINERAL INDUSTRY SURVEYS

Gordon P. Eaton, Director

Reston, VA 20192

For information, contact:

James F. Carlin, Jr., Commodity Specialist

Telephone: (703) 648-4985, Fax: (703) 648-7757

Elsie Isaac (Data), (703) 648-7950

MINES-DATA: (703) 648-7799

MINES FaxBack: (703) 648-4999

Internet: <http://minerals.er.usgs.gov/minerals>

TIN IN SEPTEMBER 1996

Domestic consumption of primary tin in September was estimated by the U.S. Geological Survey (USGS) to be about 9% lower than in August and about 3% higher than in September 1995.

The *Platt's Metals Week* composite price for tin was \$4.08 per pound; slightly lower than in August and 4% higher than in September 1995.

In Singapore, the eight-member Association of Tin Producing Countries (ATPC) reported at its annual conference that Australia and Thailand will be leaving their organization in December, while Brazil has decided to join it. Zaire, a member country, has now reportedly ceased producing tin and was not represented at the conference. The Australian Government declared that its decision to leave the ATPC reflected its commitment to end mineral export controls. Thailand's decision to exit was reportedly a result of its declining tin output, which has seen the country become a net tin importer.¹

In Canada, it was reported that Toronto-based Adex Mining Corp. was considering the start-up of mining at its wholly owned Mount Pleasant tin-indium prospect in New Brunswick. Adex was reportedly considering a variety of financing proposals, including debt and equity arrangements for up to \$40 million. A feasibility study was expected to be completed by year's end. Mount Pleasant is thought to contain ores capable of producing medium grade tin concentrates, but Adex reportedly hoped to show better grades with more detailed tests. Adex believed it could produce about 3,000 tons per year of tin-in-concentrate from Mount Pleasant, which also contains zinc, copper, and bismuth values.²

In Wales, British Steel Corp. announced the development of a "smart can" at its Packaging Steels Development Center (South Wales). The "smart can" utilizes temperature-sensitive inks from Kromacorp which are capable of changing color with changes in temperature. The inks are printed on shrink sleeves before being applied to steel beverage cans. Upon cooling the

beverage can in a refrigerator, the thermochromic inks change from white to blue, revealing the words "ready to serve." This change in color takes place at temperatures between 5 and 8 °C. At lower temperatures the blue words remain, but as the can warms up the message disappears. The "smart can" provides the consumer with an easy way to identify when a can is ready to drink.³

In Australia, it was announced that tin producer Renison Goldfields Consolidated (RGC) remained interested in the tin assets being privatized by the Bolivian Government. The Bolivian privatization has been postponed until later in 1996. RGC remains on a short list of four firms favored by the Bolivian Government for the acquisition of its major tin assets, which include the 26,000-ton-per-year capacity Vinto smelter and the Huanuni and Colquiri tin mines.⁴

In Indonesia, P.T. Tambang Timah announced its intention to build an extra furnace at its Bangka Island tin smelter as part of a continuing expansion of the company's production capacity. The new furnace would be the seventh at the smelter and would increase total production from about 43,000 tons per year to about 48,000 tons per year by the end of 1997. The Bangka Island tin smelter is a two-stage direct reduction, reverberatory furnace smelter fed with tin concentrates. Concentrating facilities are at Mentok. A Timah official stated that only about 5% of its tin metal production was for domestic use, and that it now exports 47% of its output to Asia, 27% to Europe, and 21% to the North American market.⁵

In Portland, OR, it was reported that Schnitzer Steel Industries Corp. had made an offer to acquire Proler International Corp. Proler is a major domestic detinner, with detinning plants in the Coolidge, AZ, and Seattle, WA, areas. Also, Proler recently built a facility at its Coolidge, AZ, plant to recover secondary tin and other metals from used printed circuit boards from the Southwest's growing electronics industry.⁶

Update

On November 15, 1996, the *Platt's Metals Week* composite price for tin was \$4.01 per pound.

¹Platt's Metals Week. Brazil Joins ATPC; Australia, Thailand Quit. V. 67, No. 39, Sept. 30, 1996, p. 3.

²Tin International. Mount Pleasant Tin-Indium Mine Under Review.

V. 69, No. 3, p. 5.

³British Steel Tinplate Welsh Technology Center Information Circular. July 1996.

⁴Metal Bulletin. RGC Patient on Bolivia. No. 8108, Sept. 2, 1996, p. 14.

⁵———. Tambang Plans Furnace at Indonesian Smelter. No. 8116, Sept. 30, 1996, p. 9.

⁶———. Schnitzer To Inherit Proler's Strategy. No. 8115, Sept. 26, 1996, p. 13.

TABLE 1
SALIENT TIN STATISTICS 1/

(Metric tons, unless otherwise noted)

	1995 p/	1996		
		August	September	January-September
Production (scrap):				
As tin metal 2/	W	W	W	W
From brass and bronze e/ 3/	10,800	900	900	8,100
Consumption:				
Primary	34,400	3,130 r/	2,840	27,300
Secondary	10,400	866	847	7,750
Imports for consumption, metal	33,200	2,380	NA	NA
Exports, metal	2,790	458	NA	NA
Stocks at end of period	4,580	4,790 r/	4,910	XX
Prices (average cents per pound): 4/				
Metals Week composite	415.61	409.11	408.04	XX
Metals Week New York dealer	294.54	285.38	284.39	XX
London, standard grade, cash	282.00	277.00	276.00	XX
Kuala Lumpur	277.59	273.59	272.40	XX

e/ Estimated. p/ Preliminary. r/ Revised. NA Not available. W Withheld to avoid disclosing company proprietary data. XX Not applicable.

1/ Data are rounded to three significant digits, except prices.

2/ Includes tin metal recovered at detinning and other plants.

3/ Includes tin recovered from copper-, lead-, and tin-base scrap.

4/ Price data from Platt's Metals Week.

TABLE 2
METALS WEEK COMPOSITE PRICE

(Cents per pound)

Period	High	Low	Average
1995 (annual)	473.30	360.15	415.61
1995:			
September	434.50	414.20	424.80
October	427.10	410.54	417.19
November	427.16	419.31	425.35
December	427.10	416.42	419.75
1996:			
January	423.56	415.24	418.59
February	417.70	411.89	415.55
March	427.03	405.03	414.71
April	435.05	422.96	429.61
May	436.25	415.30	426.88
June	418.01	410.83	413.65
July	423.04	408.27	417.03
August	411.84	407.75	409.11
September	413.10	402.69	408.04

Source: Platt's Metals Week.

TABLE 3
TINPLATE PRODUCTION AND SHIPMENTS IN THE UNITED STATES 1/

(Metric tons, unless otherwise noted)

Period	Tinplate waste (waste, strips, cobble, etc.) (gross weight)	Tinplate (all forms)			Shipments 2/
		Gross weight	Tin content	Tin per metric ton of plate (kilograms)	
1995: p/	205,000	1,660,000	9,600	5.8	2,400,000
1996:					
January	14,200	116,000	729	6.3	179,000
February	16,700	131,000	826	6.3	196,000
March	16,900	144,000	813	5.6	220,000
April	16,100	124,000	790	6.3	202,000
May	16,200	122,000	821	6.7	208,000
June	16,500	137,000	843	6.2	218,000
July	15,700	141,000	857	6.1	231,000
August	14,600	132,000	845	6.4	261,000
September	14,200	133,000	809	6.1	NA

p/ Preliminary. NA Not available.

1/ Data are rounded to three significant digits.

2/ Shipments data from American Iron and Steel Institute monthly publication AIS10.

TABLE 4
U.S. TIN IMPORTS FOR CONSUMPTION AND EXPORTS 1/

(Metric tons)

Country or product	1995	1996		January- August
		July	August	
Imports:				
Metal (unwrought tin):				
Bolivia	6,630	476	543	4,470
Brazil	8,070	760	959	6,200
China	5,610	328	6	2,140
India	146	--	100	436
Indonesia	7,230	885	660	4,830
Malaysia	3,810	505	45	915
Russia	149	64	--	435
Other	1,510	66	69	761
Total	33,200	3,080	2,380	20,200
Other, (gross weight):				
Alloys	11,400	910	957	7,650
Bars and rods	484	26	57	452
Foil, tubes, and pipes	16	--	--	(2/)
Plates, sheets, and strip	468	28	1	630
Powders and flakes	37	--	--	--
Waste and scrap	15,900	599	628	5,740
Miscellaneous	1,470	132	107	760
Total	29,800	1,700	1,750	15,200
Exports (metal)	2,790	208	458	3,040

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Less than 1/2 unit.

Source: Bureau of the Census.

TABLE 5
CONSUMPTION OF TIN IN THE UNITED STATES, BY FINISHED PRODUCT 1/

(Metric tons of contained tin)

Product	1996							January- September total
	1995 p/	August			September			
		Primary	Secondary	Total	Primary	Secondary	Total	
Alloys (miscellaneous) 2/	W	W	W	W	W	W	W	W
Babbitt	254	21	W	21	21	W	21	180
Bar tin and anodes	77	W	--	W	9	--	9	61
Bronze and brass	1,940	67	124	191	46	93	139	1,380
Chemicals	W	W	--	W	W	--	W	W
Collapsible tubes and foil	W	W	--	W	W	--	W	W
Solder	9,470	523 r/	224	747 r/	506	236	742	6,680
Tinning	689	138	--	138	135	--	135	1,230
Tinplate 3/	9,610	845	W	845	809	W	809	7,330
Tin powder	159	48	--	48	W	--	W	291
White metal 4/	W	W	--	W	W	--	W	8
Other	6,680	587	18	605	417	18	435	5,320
Total reported	28,900	2,230 r/	366	2,600 r/	1,940	347	2,290	22,500
Estimated undistributed consumption 5/	15,900	900	500	1,400	900	500	1,400	12,600
Total	44,800	3,130 r/	866	4,000 r/	2,840	847	3,690	35,100

p/ Preliminary. r/ Revised. W Withheld to avoid disclosing company proprietary data; included with "Other."

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Includesterne metal.

3/ Includes secondary pig tin and tin acquired in chemicals.

4/ Includes pewter, britannia metal, and jewelers' metal.

5/ Estimated consumption of plants reporting on an annual basis.

TABLE 6
DEFENSE LOGISTICS AGENCY
TIN STOCKPILE DISPOSALS 1/

(Metric tons)

Period	Monthly disposals
1995:	
September	235
October	110
November	20
December	15
Year total	955
1996:	
January	90
February	450
March	534
April	5
May	10
June	330
July	1,180
August	1,370
September	2,300
Total	6,260

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ These disposals represent only the daily, spot sales program. They do not include the long-term dealer contract sales program.

Source: Defense Logistics Agency.